CLASSIFICATION OF THE LANGUAGES OF THE NORTH PACIFIC COAST.

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THE North Pacific Coast is inhabited by a great number of Indian tribes who speak many distinct languages. A comparison of vocabularies of these languages has led to the following grouping in linguistic stocks. In Southern Alaska we find a number of dialects of the Tlingit language. On Queen Charlotte Islands and on a few islands of the Prince of Wales Archipelago the Haida is spoken. In the northern portion of British Columbia, particularly along Naass River and Skeena River, we find the Tsimshian spoken in two dialects. From Northern British Columbia to the central portion of Vancouver Island extend the Kwakiutl, whose language is spoken in three closely allied dialects. Adjoining them at the west coast of Vancouver Island live the Nootka. South and east of these regions a great number of languages are spoken which are all affiliated, and called the Salish languages. An isolated branch of this stock lives among the Kwakiutl, while the great body is located in the interior of British Columbia, Washington, Northern Idaho and Northwestern Montana. A small isolated branch is found south of Columbia River. On the coast of Washington they enclose a small territory on which the Chemakum language is spoken. Along Columbia River they adjoin the Sahaptin and Chinook languages. The Willamette River valley was occupied by people speaking two distinct languages, the Calapooya and the Molala. In this enumeration I have omitted the Athapascan, which is spoken in the northern interior of British Columbia and in a number of isolated regions along the Pacific coast.

In comparing these languages we are, first of all, struck by a certain similarity of phonetics among most of them. We find an abundance of k sounds, articulated in all positions from the posterior velar to the anterior palatal position; a series of lateral explosives or l sounds articulated at the posterior portion of the palate. On the other hand, the aspirate labials and the lingual r are absent. The only languages which show an entirely different phonetic type are the

Calapooya and Molala.   As little is known regarding their structure, I must omit them in the following considerations.

The phonetic system of the various languages may best be set forth by the following scheme:

	Labials.	Point of Tongue.	Back of Tongue.	Thrills. R.	Laterals. L.
Tlingit	—	1	1	1	1
Haida	—*	1	1	1	1
Tsimshian..........	1	1	1	1	1
Kwakiutl	1	1	1	—	1
Nootka	1	1	1	—	1
Salish..............	1 †	1	1	—	1
Chemakum	1	1	1	—	1
Chinook	1	1	1	—	1

* M occurs sometimes, but pronounced with semi-closure of the lips.
† Except the Tillamook dialect.

This tabulation shows that the Tlingit, Haida and Tsimshian take a peculiar position among the other dialects, as they have an *r* sound, and as the first two have no labials.   The *r* sound in question is a uvular thrill, the lips assuming at the same time the *w* position. As the thrill is very light, particularly in Tlingit and Tsimshian, the sound is often mistaken for *u*.   In Bishop Ridley's translation of the Gospel I find, for instance, g'uel for what I hear as g'ᴇ'ʀᴇl.

In all these languages the difference between surds and sonants is very slight, so much so that I doubt if there is any real difference of this character in Haida and Tlingit.   It exists, undoubtedly, in the Kwakiutl and Salish.   In the latter language we find the peculiarity that in many dialects *m* and *n* are pronounced with semi-closure of the nose, so that they are difficult to distinguish from *b* and *d*.   This peculiarity is also found, although to a less extent, in the Kwakiutl, Nootka, Chemakum and Chinook languages.

When we turn to a consideration of the grammatical form of these languages, we shall find again that Haidi and Tlingit stand decidedly by themselves when compared to the rest of the languages. While all the others use reduplication for grammatical purposes, no trace of reduplication is found in these two languages.   A closer comparison reveals a number of other traits which they have in common.   There is no trace of grammatic gender and no separate forms for singular and plural or distributive.   When it is necessary to state expressly that the plural is meant, a word denoting "a number of " is placed after the noun.   Compound nouns are very

numerous, the compounds being placed side by side without any alteration. Words of two, three and more components which seem to be monosyllabic occur. Local adverbs, which always retain their independence, frequently enter into compound words of this kind. The adjective always follows the noun to which it belongs.

In both languages there are four forms of the personal pronoun. In the independent pronoun the selective and the ordinary form may be distinguished. For instance, in Tlingit, the question: "Who among you is going to go?" requires the answer *xatc*, I; while the question, "Who is there?" requires the answer *xat*, I. The pronoun of transitive verbs differs from that of intransitive verbs, the latter being identical with the objective form of the former. In Tlingit we have *qat* (1) *r*E (2) *nek* (3) I (1) (am) sick (3), the *r*E being a particle, but *at* (1) *qa* (2) *sae'* (3) it (1) I (2) cook (3); in Haida; *de* (1) *st'e'ga* (2) I (1) sick (2); but *tla* (1) *ga* (2) *ta* (3), I (1) it (2) eat (3). The latter example elucidates another point of resemblance between the two languages. When transitive verbs have no object, it is necessary to add a general object, in Tlingit *at* (1) *qa* (2) *qa* (3), It (1) I (2) eat (3); in Haida *tla* (1) *ga* (2) *ta* (3), I (1) it (2) eat (3). The transitive verb is formed in both languages by placing the objective pronoun first, next the subject, and last the verb. The objective pronoun is derived in both languages from the objective form of the personal pronoun. The interrogative is formed in Tlingit by the particle *ag*E, in Haida by *gua*. In the former language the particle follows the verb, in the latter the pronoun. In both languages, however, it follows the adverb, if there is one. The enumeration of similarities shows a far-reaching resemblance of structure of the two languages. I will add a short list of compound words which will make the similarity of structure still clearer.

English.	Tlingit	Literal Translation.	Haida.	Literal Translation.
ankle	*q'os t'aq*L	leg knuckle	*gy'aLt'am*E'*l*	leg knuckle
dancing leggins	*q'os qet*	leg dancing apparel	*gy'a*L *gya*	leg dancing apparel
lycopodium	*q'oqan si'ge*	deer belt	*g'at* L*dsga'wa*	deer belt
pipe	*ts'eqda ket*	smoke around box	*xe'*LEn *ga'eu da'o*	mouth smoke box
pregnant	*to kat gat'a*	her womb child	*l ta*L *gyit'e'*	her womb child
roof	*hit ka*	house top	*na u'na*	house top
thief	*ta'o s'a'te*	stealing master	*g'o'*Lta *lra'era*	stealing master
warrior	*g'au s'a'te*	fighting master	*ra'*HiLa *lra'era*	fighting master

This similarity of structure becomes the more surprising if we take into consideration that not one of the neighboring languages shows any of the peculiarities enumerated here. The structural resemblance of the two languages and their contrast with the neighboring languages can be explained only by the assumption of a common origin. The number of words which may possibly be connected by etymology is small, and the similarities are doubtful. Nevertheless, the structural resemblance must be considered final proof of a historical connection between the two languages. In concluding, I give a brief list of similar words:

English.	Tlingit.	Haida.
child	gat	gyit
small	ga'tsko	gE'tso
ear	guk	gvu
thumb	gouc	k'use'
blood	cE	g.a'i
knuckle	t'aqʟ	t'amE'l
septum	t'aka'	t'a'nri
sinew	t'as	t'a'tse
elbow	t'er	tsEgui'
heart	tek	tek'o'go
knee	q'ulo'	kyer
people	na	na (house)
to stand	gya	gya]
dry	xoq	qa
woman	ca'wat	dja'at
on top of	ki	gi
man	ʟingit	e'ʟinga
"	qa	q'al

The next group of languages embraces the Tsimshian, Kwakiutl and Nootka, Salish and Chemakum. As I have proved at another place (*Sixth Report on the Northwestern Tribes of Canada, Proceedings of the British Association for the Advancement of Science, 1890*) that Kwakiutl and Nootka are dialects of the same stock, I do not need to enter on this point here.

All those languages use amplification of the stem for indicating plurality. The plurality may be distributive or frequentative. The amplification of the stem is brought about either by diæresis, by reduplication or by the use of infixes. Time and locality are defined very sharply. In most dialects of these languages presence and absence and past and present are always designated. In other

respects the languages show great differences.   The Tsimshian has certain characters which mark it out decidedly from all the others. While among the southern languages composition is almost always by means of suffixes, the Tsimshian has almost exclusively prefixes. In counting, a few classifying suffixes are found, but we do not observe the occurrence of suffixes or prefixes denoting nouns that are not class-words, such as: parts of the body, house, fire, water.   On the other hand, contractions in which parts of words are suppressed apparently for reasons of euphony appear quite frequently, while they are very rare in the southern group of languages, if they exist at all.   Therefore, the analysis of Tsimshian words reveals the fact that the principles of composition are quite distinct from those of the Kwakiutl and other southern languages.

The southern group of languages, the Kwakiutl, Salish and Chemakum, which show hardly any indications of relationship, so far as their vocabulary is concerned, have a series of very peculiar traits in common.   First among these I mention the occurrence of suffixes denoting nouns ; not class-words, but nouns designating concrete, individual objects.   Such are primarily parts of the body, furthermore designations of localities, of fire, water, road, blanket, domestic animal (*i. e.*, in olden times, dog) and many others. These words are so peculiar and, moreover, cover in these languages so nearly the same classes of objects, that I cannot help thinking there must be a common source from which they have sprung.   We do not find nouns of this character in the Kutonaxa, which adjoins the Salishan languages, nor in the Athapascan, while similar suffixes are found in the Algonquin languages.   It is worth remarking that inside the same linguistic stock, namely, the Salishan, their application varies widely.   In the dialects of the interior these suffixes are found very frequently, while they are rarer in the coast dialects.   Another very important peculiarity which those three languages have in common, and in which they differ from all the neighboring languages, is that whenever an adverb accompanies the verb the former is inflected, while the verb, at least the intransitive verb, remains unaltered.   In the Kwakiutl language the object even is inflected while the verb remains unchanged.   When a transitive verb is accompanied by an adverb the latter always takes the suffix of the pronominal sub*ect, while the verb takes that of the pronominal object.

These similarities are so pronounced and so peculiar that they must have originated in a common source.

In judging the differences between the languages of this group, it may be well to dwell briefly on the differences of dialects in two of them, namely, the Salish and the Kwakiutl. The Salish is remarkable for the great number of its dialects and the diversity of forms which they have assumed. These dialects may be grouped in those of the coast, the Lillooet, the Shushwap and the Okanagan. Each of them, except the Shushwap, embraces a number of dialects. The greatest number and greatest diversity are embraced in the coast dialects. All of these have pronominal gender, while the dialects of the interior have no trace of gender. The most northern of this group of dialects, the Bilxula, is remarkable for the extensive elision of vowels. The most southern dialect of the group has lost all the labials, which are frequent in all the other Salishan languages. Most of these dialects also distinguish in the pronoun between presence and absence. The Shushwap dialect is remarkable because it is the only one that has preserved the exclusive and inclusive forms of the first person plural. All the dialects of the interior have many verbs the singular and plural of which is formed from distinct stems. They use suffixes denoting specific nouns much more extensively than the dialects of the coast. They do not distinguish between absence and presence.

The Kwakiutl and Nootka show differences that are still more far-reaching than those between the Salishan dialects. Both localize actions sharply by means of suffixes. The Nootka is satisfied with designating actions as having happened in the house, on the beach, on the water, etc. The Kwakiutl adds always if they took place near the speaker, near the person addressed, absent visible or absent invisible, and also the time, if in the past or in the future. The Kwakiutl has an exclusive and inclusive form of the first person plural which has disappeared in the Nootka. If such differences occur between more closely allied dialects, we do not need to wonder at the greater differences between these languages which show only certain similarities of structure. Each point of similarity gains rather greater weight on account of the divergence of the dialects of each stock among each other.

The differences between the languages may be defined as follows: The Kwakiutl and Nootka have a much sharper localization than any

of the other languages. They lack entirely pronominal gender. They have an inclusive and exclusive form of the first person plural. Their use of the negation in compounds deserves special mention. Their negation is a prefix which enters into composition.

The Salishan languages have prenominal gender. They distinguish presence and absence, and have inclusive and exclusive forms of the first person plural.

The Chemakum has also pronominal gender. The amplification of the stem for the purpose of forming distribution takes peculiar forms which are not found in the other languages. An apparent infix—*ts*—is the most peculiar of these forms.

I attribute great weight to the occurrence of pronominal gender in both the Chemakum and Salish, as this is a phenomenon of very rare occurrence in America.

Turning further south, we reach a type of language which is entirely distinct from those treated heretofore. This language is the Chinook. It has none of the peculiar nominal suffixes which characterize the preceding group of languages. In fact, its words are of very simple build, local adverbs only entering into the composition of words. Its most important character is the existence of a real gender. The Chinook has a masculine, feminine and neuter, the last-named gender designating, primarily, small objects. So far as I am able to judge, the classification of nouns according to gender does not follow any rules. The vowel of the stem is always in harmony with the vowel of the prefix, so that *e'-ka-la*, male, becomes *o'-ko-la* in the feminine. There exist a surprisingly large number of onomatopoetic terms. Particularly verbs which designate actions accompanied by a noise belong to this class, as: to laugh, to split, to tear, to dig. The language abounds in abstract terms. Many of our adjectives can be expressed only by such terms. Thus the Chinook says, instead of "the bad man," "the man his badness;" instead of "I am sick," "my sickness is on me." We find a singular, dual and plural. They are not formed by amplification of the stem. The first person dual and plural have an exclusive and inclusive form. The verb is incorporating to a degree. It designates by means of prefixes the subject, direct and indirect object. These characteristics distinguish the Chinook sharply from the other languages which we have considered heretofore.

Our review has shown that the seven languages of this region

which show, so far as we can prove at present, no etymological relationships worth considering, may be classed in four groups:

1.   The Tlingit and Haida.
2.   Tsimshian.
3.   The Kwakiutl, Salish and Chemakum.
4.   The Chinook.

The similarities of the languages belonging to each group, on the one hand, and on the other hand the differences between the groups, are so striking, that we must assume that some generic connection exists between the languages of each group.   The elucidation of the details of this connection must be left to a closer study of the languages, based upon a comparison of their dialects.   So far our knowledge of most of the languages of the Pacific Coast is confined to a meager list of vocabularies.   Therefore the classification must be considered in its infancy.   Etymologies of Indian languages, the histories of which we do not know, is a subject of the greatest difficulty, and must be based on investigations on the structure of the languages, if it shall not sink to the level of mere guessing.   In the present state of linguistic science, a classification ought to take into account structure as well as vocabulary.   The former will give us valuable clues where the comparison of mere words ceases to be helpful.   It is with the desire to call attention to the importance of this method that the imperfect comparison between the languages of the North Pacific Coast has been presented.